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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,765	11/03/2005	Hartmut Meier	2380.0010000	5840

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EXAMINER

PHAM, MINH CHAU THI

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

08/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/529,765

Applicant(s)

MEIER ET AL.

Examiner

MINH-CHAU T. PHAM

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1797

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 5/21/08 & 3/30/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heller et al (5,641,341), in view of the Chinese Patent (CN 2348917).

Heller et al disclose a device of a reflow soldering system (col. 3, lines 23-33) or a processing device for disposing exhaust gases of a reflow soldering system wherein the gases produced by the reflow soldering is in communication with a first filter chamber (22) by way of a first conduit (24) which is in communication with the exhaust zone (20) and enters into the cooling zone (16) by way of the second conduit (26). Claims 1-5 and 7-10 differ from the disclosure of Heller et al in that there is a deposition wall having a surface configured to receive a film of liquid. The Chinese reference

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discloses a boiler multi-pipe water membrane dust remover (see Fig. 1) wherein the concave joint sprinkler forms continuous water membrane (or in Applicant's language the film of liquid) on each of the dust removing pipe (5) and the walls of the pipe. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a dust remover forming a liquid film on the outer wall of the device as taught by the Chinese reference in the reflow soldering system of Heller et al since it is well known in the art that it is much effective to capture particulates in the gas stream via liquid deposition by absorbing the impurities of the gas into the cleaning liquid.

Response to Amendment

Applicant's arguments filed on May 21, 2008 have been fully considered but they are not persuasive.

Applicant argues that the cited reference "Soderlund does not disclose a cleaning liquid configured to clean the contaminated process gas and a deposition wall having a surface being configured to receive a film of the cleaning liquid". The Examiner now drops the Soderlund reference and newly introduces Heller et al (5,641,341) under the 103(a) rejection of claims 1-5 and 7-10 to show:

Heller et al disclose a device of a reflow soldering system (col. 3, lines 23-33) or a processing device for disposing exhaust gases of a reflow soldering system wherein the gases produced by the reflow soldering is in communication with a first filter chamber (22) by way of a first conduit (24) which is in communication with the exhaust zone (20) and enters into the cooling zone (16) by way of the second conduit (26), as

claimed. Claims 1-5 and 7-10 differ from the disclosure of Heller et al in that there is a deposition wall having a surface configured to receive a film of liquid. The Examiner newly introduces the Chinese Patent (CN 2348917) as the secondary reference in combination with the primary reference Heller et al under the 103(a) rejection of the claims to show: The Chinese reference discloses a boiler multi-pipe water membrane dust remover (see Fig. 1) wherein the concave joint sprinkler forms continuous water membrane (or in Applicant's language the film of liquid) on each of the dust removing pipe (5) and the walls of the pipe, as claimed. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a dust remover forming a liquid film on the outer wall of the device as taught by the Chinese reference in the reflow soldering system of Heller et al since it is well known in the art that it is much effective to capture particulates in the gas stream via liquid deposition by absorbing the impurities of the gas into the cleaning liquid.

Applicant's arguments with respect to claims 1-5 and 7-10 have thoroughly been considered but are moot in view of the new ground(s) of rejection, as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-CHAU T. PHAM whose telephone number is (571)272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Minh-Chau T. Pham/
Primary Examiner, Art Unit 1797
August 5, 2008